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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,279	12/28/2001	John Durbin Husher	2209P	9758

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EXAMINER

NHU, DAVID

ART UNIT PAPER NUMBER

2818

DATE MAILED: 09/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,279

Applicant(s)

HUSHER, JOHN DURBIN

Examiner

David Nhu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTIONS

Election/Restrictions

1. *Applicant's election of Group II (Claims 10-21) in page No.8 is acknowledge.*

Claims 10-21 are remained for examination. Claims 1-9 are withdrawn from consideration.

See 37CFR 1.142 (b) and MPEP & 821.0.

Drawings

2. *In figure 5, there is no the edge marked 506.*

Specifications

3. *Page 1, submit two applications entiled "Buried Power buss for High Current, High Power semiconductor Devices..., serial no. 2193P, 2208P".*

*Also, page 19, line 16, " lower int4erconnect sheet " should be – lower **interconnect** sheet --*

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada (6,008,127).

Regarding claim 10, Yamada, figures 1-38, (figures 33, 35, 36, 37, col. 8, lines 52-67, col. 9, lines 1-67), disclose a semiconductor device comprising: a semiconductor substrate 201 including a plurality of device structures (see figure 35) thereon; and an interconnect 235 on the semiconductor substrate, the interconnect comprising at least one slot 235 (see figure 33)

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provided in the semiconductor substrate and at least one metal 235 (aluminum) within the slot, wherein the at least one slot is oxidized everywhere (see col. 8, lines 52-67) except at the bottom of the slot where the interconnect forms a ground 225 (see col. col. 9, lines 58-65).

Regarding to claims 11-15, see Yamada, col. 1-14, lines 1-67.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada (6,008,127).

Regarding claim 16, Yamada, figures 1-38, (figures 33, 35, 36, 37, col. 8, lines 52-67, col. 9, lines 1-67), disclose a high voltage interconnect on a semiconductor device comprising: at least one slot 235 provided in the semiconductor substrate 201; and at least one metal 235 (aluminum) within the slot, wherein the at least one slot is oxidized (col. 8, lines 52-67) everywhere except at the bottom of the slot, and the interconnect forms a very low resistance ground trap 225 (see col. 5, lines 61-67, col. 9, lines 15-22, lines 58-65).

Regarding claims 17-21, see Yamada, col. 1-14, lines 1-67.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Thomas'743, Yamada'031 are cited as of interest.

9. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond

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within the period for response will cause the application to become abandoned
(see 710.02 (b)).

10. Any inquiry concerning this communication on earlier communications from the examiner should be directed to David Nhu, (703) 306- 5796. The examiner can normally be reached on Monday-Friday from 7:30 AM to 5:00 PM. The examiner's supervisor, David Nelms can be reached on (703) 308-4910.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

David Nhu 

September 2, 2002

